

Amendment to the Claims

1. (**Currently Amended**) A substrate processing apparatus that continuously processes a plurality of substrates, the substrate processing apparatus comprising:

a conveyor chamber constituting a substrate convey space;

a plurality of process chambers that carry out substrate processing, said process chambers being disposed so as to adjoin a periphery of said conveyor chamber, wherein said conveyor chamber is centrally disposed relative to said process chambers;

a substrate convey apparatus provided in said conveyor chamber having a function of conveying substrates; and

a control section that controls convey processing of substrates by the substrate convey apparatus so that, in a case in which after a substrate is continuously processed by two or more process chambers, the substrate is re-conveyed from the last process chamber to any of the two or more process chambers other than the last and return processing is implemented, and in the re-conveyance the substrate is conveyed to said any of the process chambers after being temporarily retracted to a place other than a process chamber,

wherein the place to which the substrate is retracted is adapted to accommodate a number of substrates, with the number of substrates being equal to the number of substrates that can be processed at one time by all of said process chambers, and

wherein, in a case in which the substrate process time in each of said two or more process chambers is equal, taking n as the number of process chambers subject to return processing and T as substrate convey time between processing chambers, the retraction time used by the control section is

$\{(n-1) \cdot T\}$.

2. **(Previously Presented)** In the substrate processing apparatus as described in claim 1,
wherein processing at each process chamber in the return processing is the same processing
as processing carried out a preceding time in each of the process chambers.
3. **(Previously Presented)** In the substrate processing apparatus as described in claim 1,
wherein processing at each process chamber in the return processing is processing under
different conditions from processing carried out a preceding time in each of the process chambers.
4. **(Previously Presented)** In the substrate processing apparatus as described in claim 1,
wherein, with respect to a single substrate, by carrying out a number of processings that is the
same as, or greater than, the number of process chambers connected to the conveyor chamber.
5. **(Previously Presented)** In the substrate processing apparatus as described in claim 4,
wherein, on the single substrate are formed a number of laminated films that is the same as,
or greater than, the number of said process chambers.
6. **(Previously Presented)** In the substrate processing apparatus as described in claim 1,
wherein the control section controls convey processing of substrates by the substrate convey
apparatus so that a second substrate is conveyed to a first process chamber after processing of a first

substrate at the first process chamber and conveyance of the first substrate to a next process chamber has been completed.

7. (Previously Presented) In the substrate processing apparatus as described in claim 1, wherein the place other than a process chamber to which the substrate is retracted is in a preliminary chamber connected to the conveyor chamber.

8. (Previously Presented) In the substrate processing apparatus as described in claim 1, wherein the place other than a process chamber to which the substrate is retracted is in a load-lock chamber connected to the conveyor chamber.

9-10. (Cancelled)

11. (Previously Presented) In the substrate processing apparatus as described in claim 1, wherein substrate process time in the process chambers is defined as the time from the closing of a gate valve separating the process chambers and the conveyor chamber to the opening of the gate valve after processing of the substrate has been carried out.

12. (Previously Presented) In the substrate processing apparatus as described in claim 1, wherein the convey time is defined as the time from the opening of a gate valve separating the transfer origin process chamber and the conveyor chamber to the convey of the substrate subject

to convey to the transfer destination process chamber after it has been held by the substrate convey apparatus, and the closing of the transfer destination gate valve.

13. (Currently Amended) In a substrate processing apparatus in which a plurality of process chambers are connected to a periphery of a centrally disposed conveyor chamber, said process chambers being ~~are~~ accommodated in a single substrate convey apparatus and continuous substrate processing is carried out in two or more process chambers P1, P2, ..., Pj (j here being a natural number of two or more) of said plurality of process chambers,

a substrate processing apparatus ~~characterized in that it is~~ equipped with a control section that controls substrate convey processing by the substrate convey apparatus so that in a case in which return processing is implemented in which, from the final process chamber Pj to carry out the continuous processing, the substrate is re-conveyed to any process chamber Px ($1 \leq x < j$) of the continuous-processing process chambers and continuous processing carried out in the order Px, ..., Py ($x \leq y \leq j$), when a substrate is returned from the final process chamber Pj to a process chamber Px, the substrate is conveyed to the process chamber Px after being temporarily retracted to a place other than a process chamber,

wherein the place to which the substrate is retracted is adapted to accommodate a number of substrates, with the number of substrates being equal to the number of substrates that can be processed at one time by all of said process chambers, and

wherein, in a case in which the substrate process time in each of said two or more process chambers is equal, taking n as the number of process chambers subject to return processing and T as

substrate convey time between processing chambers, the retraction time used by the control section is $\{(n-1) \cdot T\}$.

14. (Currently Amended) ~~A~~In—a semiconductor device manufacturing method ~~for~~ref manufacturing semiconductor devices by continuous processing of a plurality of substrates, the method comprising:

processing a substrate continuously in a plurality of processing chambers that are adjoined to a periphery of a conveyor chamber, wherein the conveyor chamber is centrally disposed with respect to the processing chambers;

~~a semiconductor device manufacturing method characterized in that, in a case in which re-~~
conveying the substrate after the ~~after a substrate has been~~is continuously processed by two or more of the ~~processing~~process chambers, wherein the substrate is re-conveyed from the last processing~~process~~ chamber to any of the two or more ~~processing~~process chambers other than the last processing chamber, and thereby implementing return processing implemented of the substrate; ~~in the and~~

temporarily retracting the substrate ~~re-conveyance the substrate is conveyed to said any of the process chambers after being temporarily retracted to a place other than a~~ ~~processing~~process chamber during re-conveyance of the substrate, wherein the place to which the substrate is retracted is adapted to accommodate a number of substrates, with the number of substrates being equal to the number of substrates that can be processed at one time by all of said processing chambers, and

wherein, in a case in which the substrate process time in each of said two or more

~~processing~~process chambers is equal, taking n as the number of ~~processing~~process chambers subject to return processing and T as the substrate convey time between processing chambers, the retraction time used by the control section is $\{(n-1) \cdot T\}$.

15-16. (Cancelled)